

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for forming non-separating diffusers in a part comprising the steps of:
 fabricating at least one metering hole in a part;
 providing at least one electrode comb comprising a tooth, said tooth comprising a nose comprised of a plurality of diffuser surfaces intersecting at a point on a tooth centerline, said plurality of diffuser surfaces each possessing a diffuser angle, and at least one of said plurality of diffuser surfaces truncated by an offset from the centerline; and
 fabricating at least one diffuser hole with said electrode comb in said part so that said at least one diffuser hole intersects said at least one metering hole at a transition region.
2. (Original) The method of claim 1, wherein said fabricating said at least one metering hole comprises utilizing a method of fabrication selected from the group consisting of electro discharge machining (EDM), LASER drilling, and electron beam drilling.
3. (Original) The method of claim 1, wherein fabricating said at least one metering hole is performed prior to fabricating said at least one diffuser hole.

4. (Original) The method of claim 1, wherein providing said electrode comb comprises the step of providing an electrode comb wherein at least one of said plurality of diffuser surfaces is offset from the comb centerline by a distance sufficient to eliminate a step between a side of said metering hole and said diffuser hole.

5. (Original) The method of claim 4, wherein fabricating said at least one diffuser hole comprises the step of:

inserting said electrode comb into said part such that said at least one diffuser hole intersects said at least one metering hole to form at least one transition region.

6. (Original) The method of claim 1, wherein fabricating one metering hole diffuser is performed prior to fabricating said at least one metering hole.

7. (Original) The method of claim 6, wherein fabricating said at least one metering hole comprises the step of:

fabricating said at least one metering hole such that said at least one metering hole intersects with said at least one diffuser hole to form at least one transition region.

8. (Currently Amended) The method of claim 1, wherein said ~~additional diffuser angle portion~~ of each of said at least one diffuser surfaces comprises an angle not greater than 12°.

9. (Currently Amended) The method of claim 1, wherein said ~~additional diffuser angle portion~~ of each of said at least one diffuser surfaces comprises an angle of approximately 10°.

10. (Original) The method of claim 1, wherein fabricating at least one metering hole in a part comprises fabricating said at least one metering hole in a turbine component.

11. (Currently Amended) An electrode comb for providing diffusing holes comprising:

at least one nose extending to a point along a centerline, said nose comprising ~~an additional angle portion~~ a plurality of diffuser surfaces capable of forming a transition region.

12. (New) The electrode of claim 11, wherein at least one of said plurality of diffuser surfaces is truncated by an offset from said centerline.

13. (New) The electrode of claim 11, wherein said plurality of diffuser surfaces each possess a diffuser angle.

14. (New) The electrode of claim 13, wherein said diffuser angle of at least one of said plurality of diffuser surfaces comprises an angle not greater than 12°.

15. (New) The electrode of claim 13, wherein said diffuser angle of at least one of said plurality of diffuser surfaces comprises an angle of approximately 10°.